

Larry Hogan, Governor - Boyd Rutherford, Lt. Governor - Van Mitchell, Secretary

December 24, 2015

Public Health Preparedness and Situational Awareness Report: #2015:50 Reporting for the week ending 12/19/15 (MMWR Week #50)

CURRENT HOMELAND SECURITY THREAT LEVELS

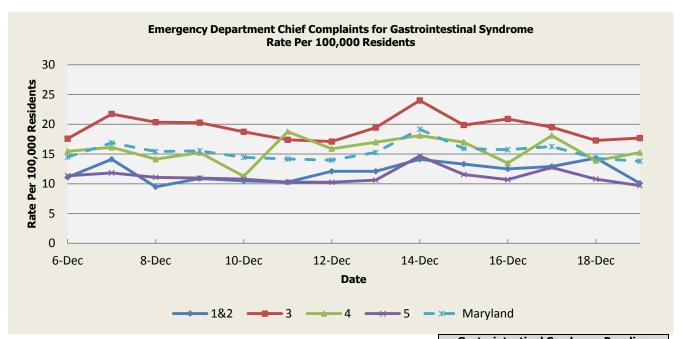
National: No Active Alerts

Maryland: Level Four (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

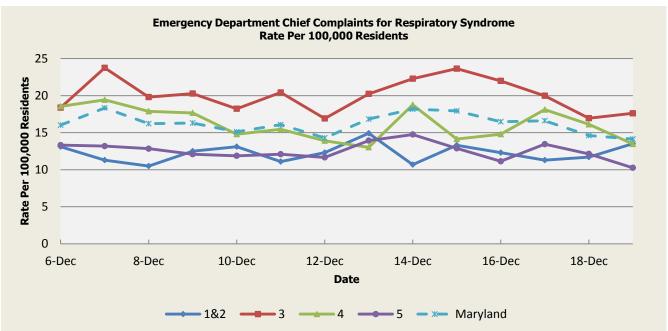
Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census.



There were five gastrointestinal illness outbreaks reported this week: 1 outbreak of gastroenteritis associated with a daycare center (Region 3), 1 outbreak of gastroenteritis associated with a school (Region 3), 1 outbreak of gastroenteritis/foodborne associated with a caterer (Region 3), 1 outbreak of gastroenteritis associated with a church (Region 3), and 1 outbreak of gastroenteritis associated with a restaurant (Region 3).

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2						
Mean Rate*	12.88	14.50	15.27	10.17	12.76		
Median Rate*	12.70	14.25	14.57	10.08	12.63		

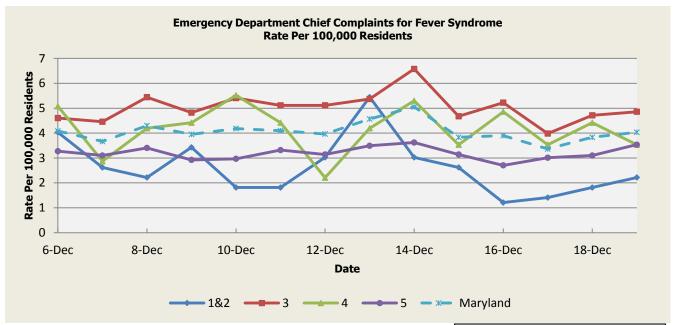
^{*} Per 100,000 Residents



There were no respiratory outbreaks reported this week.

	Respiratory Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2	3	4	5	Maryland			
Mean Rate*	11.89	13.62	13.79	9.71	11.99			
Median Rate*	11.49	13.12	13.47	9.39	11.60			

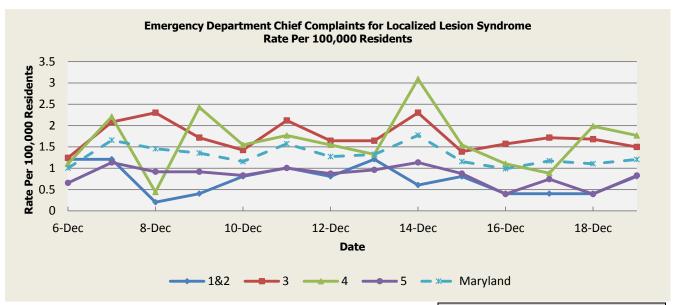
* Per 100,000 Residents



There were no fever outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2 3 4 5 Marylan							
Mean Rate*	3.09	3.69	3.86	3.05	3.41			
Median Rate*	3.02	3.54	3.75	2.97	3.30			

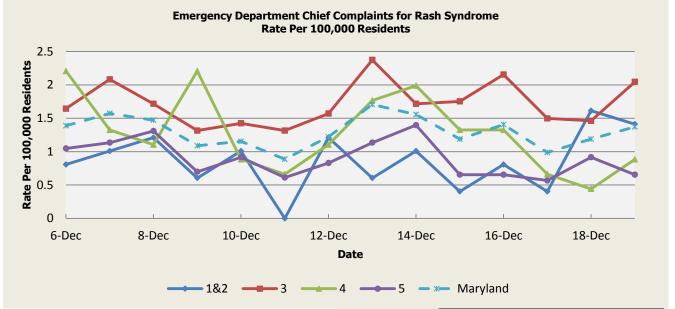
Per 100,000 Residents



There were no localized lesion outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	Maryland					
Mean Rate*	1.09	1.92	2.04	0.99	1.51		
Median Rate*	1.01	1.86	1.99	0.96	1.46		

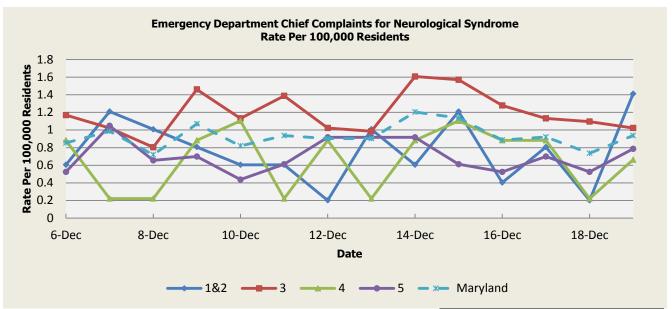
* Per 100,000 Residents



There were two rash outbreaks reported this week: 1 outbreak of fifth disease associated with a school (Region 3), and 1 outbreak of hand, foot and mouth disease associated with a daycare center (Region 3).

	Rash Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2	Maryland						
Mean Rate*	1.32	1.74	1.05	1.44				
Median Rate*	1.21	1.68	1.77	1.00	1.41			

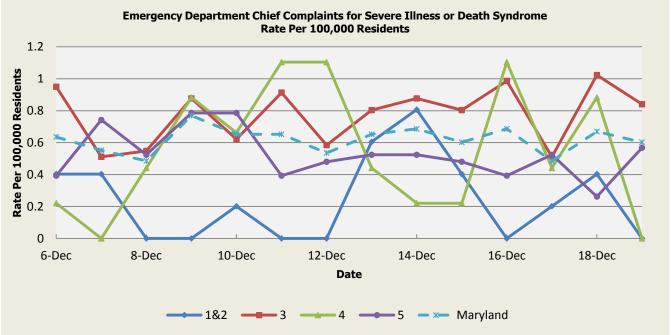
^{*} Per 100,000 Residents



There were no neurological syndrome outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present								
Health Region	1&2								
Mean Rate*	0.62	0.62 0.70 0.63 0.46 0.59							
Median Rate*	0.60	0.66	0.66	0.44	0.55				

^{*} Per 100,000 Residents

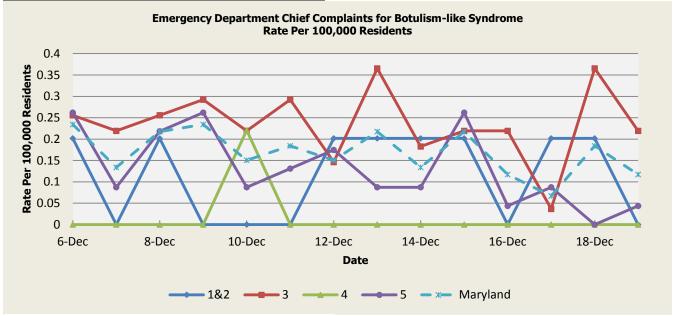


There were no severe illness or death outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2						
Mean Rate*	0.73	0.96	0.87	0.43	0.73		
Median Rate*	0.60	0.95	0.88	0.44	0.72		

^{*} Per 100,000 Residents

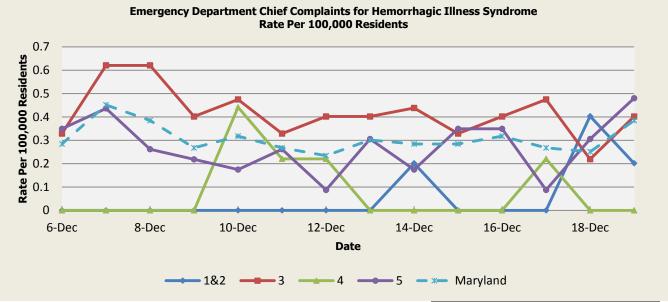
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 12/13 (Regions 1&2,3,5), 12/14 (Regions 1&2,3,5), 12/15 (Regions 1&2,3,5), 12/16 (Region 3), 12/17 (Regions 1&2,5), 12/18 (Regions 1&2,3), and 12/19 (Region 3). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2 3 4 5 Mary						
Mean Rate*	0.06	0.07	0.04	0.04	0.06		
Median Rate*	0.00	0.04	0.00	0.04	0.03		

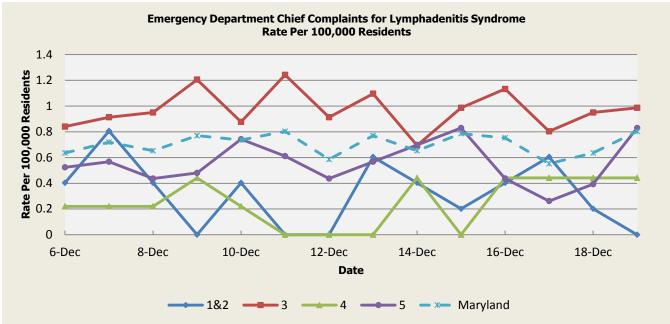
* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 12/13 (Regions 3,5), 12/14 (Regions 1&2,3,5), 12/15 (Regions 3,5), 12/16 (Regions 3,5), 12/17 (Regions 3,4) 12/18 (Regions 1&2,3,5), and 12/19 (Regions 1&2,3,5). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	5	Maryland		
Mean Rate*	0.03	0.08	0.06	0.06		
Median Rate*	0.00	0.04	0.00	0.04	0.03	

* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 12/13 (Regions 3,5), 12/14 (Region 5), 12/15 (Regions 3,5), 12/16 (Region 3), 12/18 (Region 3), and 12/19 (Regions 3,5). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2	3	4	5	Maryland			
Mean Rate*	0.31	0.42	0.34	0.27	0.35			
Median Rate*	0.20	0.33	0.22	0.22	0.30			

^{*} Per 100,000 Residents

MARYLAND REPORTABLE DISEASE SURVEILLANCE

	Counts of Reported Cases‡						
Condition		December		Cumulative (Year to Date)**			
Vaccine-Preventable Diseases	2015	Mean*	Median*	2015	Mean*	Median*	
Aseptic meningitis	9	22.6	23	456	438.8	460	
Meningococcal disease	0	0.2	0	2	7	7	
Measles	0	0	0	0	0.6	0	
Mumps	0	0.8	1	21	21.8	4	
Rubella	0	0	0	1	1.2	1	
Pertussis	1	12.8	10	96	208.2	203	
Foodborne Diseases	2015	Mean*	Median*	2015	Mean*	Median*	
Salmonellosis	7	28.4	24	809	911.4	913	
Shigellosis	9	5.6	4	218	158	129	
Campylobacteriosis	6	25.4	26	604	592.8	615	
Shiga toxin-producing Escherichia coli (STEC)	1	3.2	3	85	71.8	68	
Listeriosis	0	0.6	0	15	15.8	16	
Arboviral Diseases	2015	Mean*	Median*	2015	Mean*	Median*	
West Nile Fever	0	0	0	16	7	6	
Lyme Disease	7	24.8	24	1194	1179.8	1297	
Emerging Infectious Diseases	2015	Mean*	Median*	2015	Mean*	Median*	
Chikungunya	0	0.8	0	14	12.6	0	
Dengue Fever	0	0.2	0	10	10.6	11	
Other	2015	Mean*	Median*	2015	Mean*	Median*	
Legionellosis	2	6.2	6	128	135.8	140	

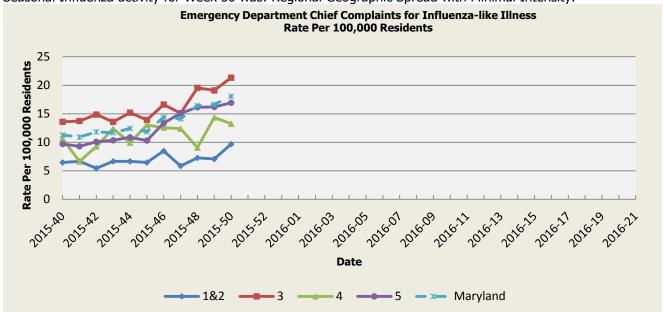
[‡] Counts are subject to change

^{*}Timeframe of 2009-2014

^{**}Includes January through current month

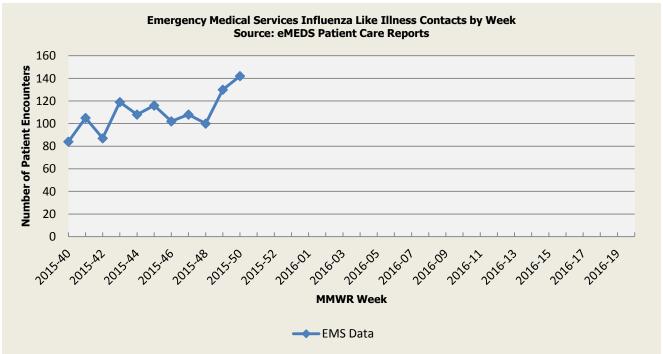
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October through May). Seasonal Influenza activity for Week 50 was: Regional Geographic Spread with Minimal Intensity.

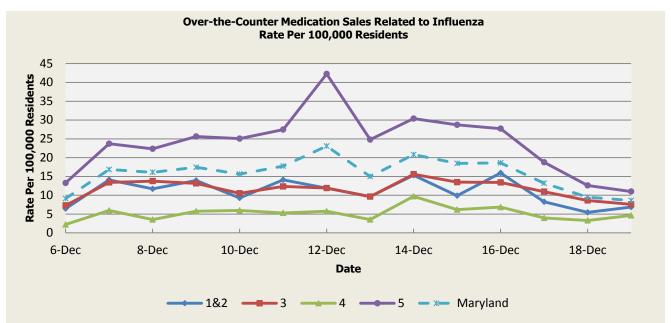


Influenza-like Illness Baseline Data Week 1 2010 - Present						
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	9.28	10.88	10.73	9.95	10.38	
Median Rate*	7.46	8.62	8.83	7.68	8.22	

* Per 100,000 Residents



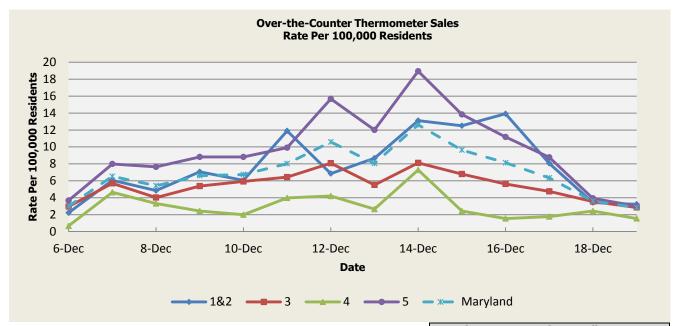
Disclaimer on eMEDS flu related data: This data is based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. This data is reported for trending purposes only.



There was an appreciable increase above baseline in the rate of OTC flu medication sales on 12/14 (Regions 1&2,3,4,5), 12/15 (Regions 3,5), and 12/16 (Regions 1&2,3,4).

	OTC Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.49	6.17	3.11	13.89	8.84
Median Rate*	4.23	5.15	2.65	11.35	7.25

* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of OTC thermometer sales on 12/14 (Regions 1&2,4,5), 12/15 (Regions 1&2), and 12/16 (Regions 1&2).

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.63	4.68	3.32	7.69	5.81
Median Rate*	4.84	4.31	3.09	7.07	5.35

^{*} Per 100,000 Residents

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a deescalation of activities towards those in the interpandemic phase may occur. As of <u>December 14, 2015</u>, the WHO-confirmed global total (2003-2015) of human cases of H5N1 avian influenza virus infection stands at 844, of which 449 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

Avian Influenza in Humans:

SUSPECTED H5N1 (EGYPT): 23 Dec 2015 A medical source in Port Said Health Department said that 31 people are being treated in Fever Hospital because they are suspected of having avian influenza. The source added that the suspected cases are all from Sahl El-Tina villages. They are waiting for the results of the analysis to prove whether it is avian influenza or severe cold. Read More: http://www.promedmail.org/post/3886176

H5N1 (ALGERIA): 19 Dec 2015 Avian flu in Tebessa: Analysis indicated that the 4th death was due to H5N1. Read More: http://www.promedmail.org/post/3873849

H7N9 (CHINA): 19 Dec 2015 On 11 Dec 2015, the National Health and Family Planning Commission (NHFPC) of China notified WHO of 2 additional laboratory-confirmed cases of human infection with avian influenza A (H7N9) virus. Read More: http://www.promedmail.org/post/3873848

There were no reports of human cases of avian influenza in the United States at the time that this report was compiled.

Avian Influenza in Poultry:

H5N1, H5N2, H5N3, H5N9 (FRANCE): 19 Dec 2015 Avian influenza of high pathogenicity (H5N1, H5N2, and H5N9) and low pathogenicity (H5N2, H5N3) in poultry in France. Read More: http://www.promedmail.org/post/3875709

NATIONAL DISEASE REPORTS

There were no relevant national disease reports this week.

INTERNATIONAL DISEASE REPORTS

ANTHRAX (ZIMBABWE): 20 Dec 2015 An anthrax outbreak has been reported in Umzingwane District in Matabeleland South Province with 36 people getting infected and at least 42 head of cattle dying, amid fears that contaminated meat could have been sold to butcheries in Bulawayo. The disease, which can be fatal if not treated, can be transmitted through eating the meat of infected animals. Matabeleland South provincial

principal veterinary officer Dr. Enat Mdlongwa said the disease was detected last week at Mzola and Mahanka dip tanks. Read More: http://www.promedmail.org/post/3881339

CONTACT TOXICANT (FRANCE): 19 Dec 2015 A total of 14 Parisian worshippers were poisoned on [Mon 14 Dec 2015] after their synagogue's electronic lock was daubed with poison. Read More: http://www.promedmail.org/post/3875879

LISTERIOSIS (GERMANY): 19 Dec 2015 Listeriosis patient isolates in Germany have shown a new identical pulsed-field gel electrophoresis (PFGE) pattern since 2012 (n = 66). Almost all isolates (Listeria monocytogenes serotype 1/2a) belonged to cases living in southern Germany, indicating an outbreak with a so far unknown source. Case numbers in 2015 are high (n = 28). No outbreak cases outside Germany have been reported. Next generation sequencing revealed the unique cluster type CT1248 and confirmed the outbreak. Investigations into the source are ongoing. Read More: http://www.promedmail.org/post/3873909

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the DHMH website: http://phpa.dhmh.maryland.gov/influenza/fluwatch/SitePages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.dhmh.md.gov/

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE		
	Allegany County		
Pagions 1 & 2	Frederick County		
Regions 1 & 2	Garrett County		
	Washington County		
	Anne Arundel County		
	Baltimore City		
Region 3	Baltimore County		
Region 3	Carroll County		
	Harford County		
	Howard County		
	Caroline County		
	Cecil County		
	Dorchester County		
	Kent County		
Region 4	Queen Anne's County		
	Somerset County		
	Talbot County		
	Wicomico County		
	Worcester County		
	Calvert County		
	Charles County		
Region 5	Montgomery County		
	Prince George's County		
	St. Mary's County		

